

TWO WATERSPOUTS IN MOBILE BAY, JUNE 12, 1925

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During the early forenoon of June 12, 1925, two waterspouts developed at Mobile on a shallow and nearly land-locked arm of Mobile Bay, just southeast of the city.

Weather conditions.—The sky was partly cloudy from 5 a. m. to 5:50 a. m., and cloudy afterwards. Only stratus clouds were visible, although these somewhat resembled strato-cumulus while the weather was partly cloudy. Later, the entire sky was overcast with layers of stratus clouds, some of which were quite dark at their lower margins. At 6:45 a. m. the clouds were moving from ESE. The surface wind direction was SW. till 5:51 a. m., then from the E. and SE. until 7:34 a. m., when it shifted to the NW. The wind movement was about 3 miles an hour during the three hours ending at 6:30 a. m., when it increased with gusts and registered a maximum velocity of 22 miles at 7 a. m. The barometric pressure rose 0.09 inch to 30.01 inches during the two hours ending at 8 a. m. Rain began at 6:20 a. m. and ended at 9:19 a. m., amounting to 3.34 inches. It was a light sprinkle until 6:43 a. m., and became excessive at 7:47 a. m., following the shift of wind to the NW.; 3.26 inches fell in the succeeding hundred minutes. The temperature at 6:45 a. m. was 73°, which was 3° lower than at 1 a. m., and it fell to 68° during the excessive rain.

Information from spectators of the waterspouts was collected and collated, and is included in the following account. Statements regarding details that could not be reconciled were discarded.

The first display was for about 15 minutes beginning at 6:10 a. m., and the waterspout moved westward 300 yards, disintegrating near shore. It was of the dumb-bell form, and as viewed at a distance of 1,000 yards was estimated to be about 15 feet in diameter.

The second waterspout began about 10 minutes after the first one ended; it lasted about 35 minutes and was observed by many persons. It was first observed from the Weather Bureau for five minutes beginning at 6:38 a. m. For two minutes it was perpendicular, and then became inclined toward the east about 4° from verticality. It was again watched from 7:04 a. m. to 7:08 a. m. No motion of translation could be detected by sighting, for about two minutes, with objects on land.

Viewed from the Weather Bureau office building, this waterspout, located 4,800 yards, S. 12° W., resembled a moderately dark gray pillar of uniform diameter visible from above the tree tops to the lower margin of a cloud of fairly dark gray hue, and there was but little enlargement of the pillar at its top. The trees that obscured the base of the spout are about 70 feet in height and 2,700 yards from the office building. The visible vertical section of the spout subtended an angle of some 10°; and the height, determined by computation, was approximately 860 yards. The angular width was about two and one-half times that of a 6-foot smokestack 2,800

feet due south, which indicates a diameter of approximately 26 feet. Rain and a smoke screen lessened the visibility, and the regular morning reading of the meteorological instruments made continuous observation of the phenomenon impossible.

J. T. Tucker, Otis Gilmore, and Theodore Brocker viewed it from a point of vantage on Tucker's bath-house pier, which extends 1,400 feet southeastward from the shore; they estimated that the base of the spout passed about a hundred feet east of the pier and 200 feet from where they were standing. A funnel-shaped projection from the under surface of a dark cloud was first seen, and it suddenly extended pencil-like to the water, which was observed to be violently moving in a counterclockwise whirl, and piling up into a mound between 5 and 10 feet high and 60 feet in diameter, at the top of which was the slightly tapering tube which had increased to 15 feet in diameter. A loud roaring noise was heard, becoming more intense as the waterspout approached. The wind was sufficiently strong to cause the observers to hold to posts, but it did not in any way damage the pier or bath-houses, which are frail structures.

Advancing westward, the spout moved 1,400 yards along a path very slightly curved to the left, then remained nearly stationary for about 20 minutes, after which it progressed southwestward about 700 yards. When it reached the shore, toward which it had leaned, it parted and receded to the clouds, and the mound of water and spray suddenly fell, producing great waves in the body of water, which has a depth varying from 3 to 6 feet.

Neither waterspout caused strong winds on land when it approached the shore.

Heavy rain extended only about a mile from the Weather Bureau station. The rainfall in the immediate vicinity of the spouts was very light—probably less than 0.01 inch, as it wet only the surface of the sandy shore. It did not begin until the waterspout phenomena had ended.

About 10 minutes after the occurrence of the second waterspout, there was a whirlwind that lasted about 5 minutes. Mr. Cyril Anthony, who was 100 yards from shore standing on Ritchie's bath-house pier, which extends south-southeastward 200 yards, noticed the water violently agitated about a hundred feet east of the outer end of the pier, where an 18-foot launch was nearly overturned and half filled with water. The rattling of loose boards, two of which were raised 5 or 6 feet, on another pier parallel to the first and about 20 feet to the north, together with the advancing agitation of the water, indicated the whirl. The disturbance had raised a mound of water and spray about 2 feet high, moved along the north side of Ritchie's wharf, then crossed it and progressed southwestward about 250 yards before disintegrating.